Ms. Pamela Stephenson Division Administrator Federal Highway Administration 55 Broadway, 10th Floor Cambridge, MA 02142 Attn: Ms. Damaris Santiago Thomas F. Broderick, P.E. Chief Engineer MassDOT 10 Park Plaza Boston, MA 02116 Attn: Mr. Michael Bastoni

Dear Ms. Stephenson:

As in the past, I believe it is necessary to respond to some of the misrepresentations and criticisms of FHWA and MassDOT by the so-called "preservationist" consulting parties in their December 7, 2012 comments on the Environmental Assessment for the Mitchell River Bridge (MRB) Replacement Project.

In particular, the group of the National Trust for Historic Preservation, the Historic Bridge Foundation, and the Indiana SPANS Task Force (hereinafter "INH parties") and the Friends of the Mitchell River Bridge ("Friends") continue to berate FHWA and MassDOT (and by implication the Advisory Council on Historic Preservation, MassSHPO and the Chatham Board of Selectmen) for their selection (or agreement with the selection) of the Alternative 3 design as the Preferred Alternative for the MRB replacement.

The Programmatic Section 4(f) Evaluation

The Friends and the INH parties chastise FHWA for its application of the 30-year old Programmatic Section 4(f) Evaluation procedure for establishing compliance with Section 4(f). Indeed, the INH parties go so far as to accuse FHWA of acting **unlawfully**. Notwithstanding the fact that the Friends and the INH parties disagree with the outcome of the Programmatic Section 4(f) Evaluation, there is nothing whatsoever "**unlawful**" about FHWA's application of that procedure to the Mitchell River Bridge (MRB) Replacement Project.

As the "Use" section of the Programmatic Section 4(f) Evaluation succinctly explains, the competing needs of the safety, continuity and integrity of the Federal-aid highway

¹ The Use section states: "The historic bridges covered by this programmatic Section 4(f) evaluation are unique because they are historic, yet also part of either a Federal-aid highway system or a state or local highway system that has continued to evolve over the years. Even though these structures are on or eligible for inclusion on the National Register of Historic Places, they must perform as an integral part of a modern transportation system. When they do not or cannot, they must be rehabilitated or replaced in order to assure public safety while maintaining system continuity and integrity. For the purpose of this programmatic Section 4(f) evaluation, a proposed action will "use" a bridge that is on or eligible for inclusion on the National Register of Historic Places when the action will impair the historic integrity of the bridge either by rehabilitation or demolition." (Emphasis added).

system and the historic integrity of bridges on or eligible for the National Register may require the "use" of such bridges by demolition, as is the case with the MRB.

An important reason for applying the Programmatic Section 4(f) Evaluation procedure is its time-saving aspects as noted in 23 CFR §774.3(d) and Section 3.3.2 of FHWA's Section 4(f) Policy Paper dated July 20, 2012. Time saving is especially important with respect to the MRB Replacement Project inasmuch as the Section 106 proceeding has interrupted the planned schedule for replacing the bridge under the ABP by more than two years. The time saving is evident in view of 23 CFR §774.5(a) which requires an additional delay of at least 60 days. Actual delay would likely be greater.

Considering now the appropriateness of FHWA's application of the Programmatic Section 4(f) Evaluation to any bridge project nationwide, including the MRB project, all of the following five criteria must be met:

- 1. The bridge is to be replaced or rehabilitated with Federal funds.
- 2. The project will require the use of a historic bridge structure which is on or is eligible for listing on the National Register of Historic Places.
- 3. The bridge is not a National Historic Landmark.
- 4. The FHWA Division Administrator determines that the facts of the project match those set forth in the sections of this document (Programmatic Section 4(f) Evaluation) labeled Alternatives, Findings, and Mitigation.
- 5. Agreement among the FHWA, the State Historic Preservation Officer (SHPO), and the Advisory Council on Historic Preservation (ACHP) has been reached through procedures pursuant to Section 106 of the NHPA.

In the case of the MRB, there is no dispute by any of the Section 106 consulting parties that all five of the above criteria have been met. Yet, INH and the Friends argue that, even though it is applicable to the MRB Project, the Programmatic Section 4(f) Evaluation should not have been applied by FHWA to the MRB Replacement Project for several reasons.

Both parties maintain that, because the Keeper of the National Register described the MRB as possessing "exceptional significance" in her DOE, FHWA should have applied the more rigorous and time consuming procedure of 23 CFR §774.3(a). Nothing in the above criteria makes an exception to applicability of the Programmatic Section 4(f) Evaluation procedure based on the language of a DOE of the Keeper or even on the characterization of a bridge as "exceptionally significant," even if that characterization were accurate. The INH parties acknowledge that the MRB is not a National Historic Landmark (NHL) under criteria 3, but equate the "exceptionally significant" language of the Keeper as tantamount to NHL status.

One of the reasons for excepting NHL bridges from a Programmatic Section 4(f) Evaluation is the fact that NHL properties must be "nationally significant" under 36 CFR Part 65. Despite the claim of the preservationist consulting parties that the MRB is the last wooden drawbridge in Massachusetts, and possibly in the United States, the MRB

simply does not meet the NHL criteria of 36 CFR §65.4(a) for establishing national significance.²

The Friends point to the "certain minor uses of Section 4(f) property" language of 23 CFR §774.3(d) and argue that, if the use is major, then the Programmatic Section 4(f) Evaluation cannot be used. The point is noted, but it does not explain why the programmatic procedure is applicable to demolition and rehabilitation that impairs the historic integrity of the bridge, both considered major uses by the Friends. See the "Use" section of the programmatic procedure. It may well be that the preservationist consulting parties need to determine why FHWA promulgated the programmatic procedure for historic bridges 30 years ago despite the language of 23 CFR §774.3(d).

All the preservationist consulting parties have taken the position that Section 4(f) applies to the **replacement** alternatives developed by MassDOT during the Section 106 proceeding. However, my position as a consulting party, and perhaps that of FHWA and MassDOT, is that the Section 4(f) alternatives apply to **avoidance** of the use (demolition) of the MRB and not to the replacement alternatives.

The term "feasible and prudent **avoidance** alternative" is used no less than eight times in 23 CFR Part 774³ and "feasible and prudent" is never used in connection with a replacement alternative. 23 CFR §774.17 defines a feasible and prudent avoidance alternative as an alternative that "avoids using [demolishing] Section 4(f) property."

It should also be pointed out that none of the case law cited by the Friends and the INH parties involved a challenge to the propriety of using the Programmatic Section 4(f) Evaluation procedure for any Section 4(f) property, and in particular historic bridges.

For the foregoing reasons, the preservationist parties' challenge to FHWA's application of the Programmatic Section 4(f) Evaluation for the MRB Replacement Project is not well taken.

The Forest Products Laboratory "Report"

The Friends and the INH parties make much of the so-called "report" solicited by the Friends of the Forest Products Laboratory (FPL)⁴ in support of their claim that wood in salt water lasts much longer than MassDOT's estimate of 20-30 years.⁵ In December

² The criteria of 36 CFR §65.4(a)(4) applies to structures "[t]hat embody the distinguishing characteristics of an architectural type specimen exceptionally valuable for a study of a period, style or method of construction, or that represent a significant, distinctive and exceptional entity whose components may lack individual distinction." The MRB cannot possibly meet that criteria, *inter alia*, because there have been five different bridge designs that have been modified and repaired so many times that the architectural types, period, styles and methods of construction from 1871 to date are markedly different. ³ The term "feasible and prudent avoidance alternative" is also used throughout FHWA's Section 4(f) Policy Paper.

⁴ The FPL report appears at pages 510-514 of Appendix I to the Environmental Assessment.

⁵ As I pointed out in my December 7 comments, the MRB is a primary example of the approximate 20-30 year service life of wood in salt water despite the existence of 67 piles that date to 1926, many of which

2011, I commented on the report⁶ and noted in particular that FPL's Team Leader, Dr. Stan Lebow, stated that his report "is not intended to endorse or recommend any construction material for the Mitchell River Bridge."

Both the INH parties and the Friends argue that FHWA and MassDOT have never substantiated the 75-100 year service life of concrete and steel in salt water. Perhaps FHWA and MassDOT considered it unnecessary to substantiate something that is common knowledge, except apparently to most of the preservationist consulting parties.⁷ Even Dr. Lebow does not "suggest that premature failure [of concrete and steel] is likely in the Mitchell River Bridge or that concrete and steel are problematic construction materials." See Appendix I of the EA at page 511.

It is worth repeating here that the company Skyline Steel provides a 39-page online design manual (attached with this e-mail letter) entitled "Designing for Durability" that illustrates how a steel pile design life of 120 years or more can be achieved using ASTM A690 steel alloy pilings along with the concept of sacrificial thickness from both sides of the piling wall. See also Skyline Steel's web site at www.skylinesteel.com.

I respectfully request that my remarks herein be included with the December 7 comments on the EA.

Respectfully submitted,

George Myers MRB Consulting Party

have been severely deteriorated for years. See, e.g., MassDOT's inspection reports of the Mitchell River Bridge of 2006, 2008, 2010, 2012 at: http://www.chatham-ma.gov/Public Documents/ChathamMA Projects/MitchellRiverBridgeReplacement.

⁶ My comments on the FPL report, most of which need not be repeated here, also appear in Appendix I at pages 523-524 (comments to the Chatham BOS) and pages 534-535 (comments to MassDOT and FHWA).

⁷ But see the comments of two consulting parties at Appendix I, pages 18 and 23.